

**NATIONAL WEATHER SERVICE  
Cedar City Remote Data Acquisition Radar Site  
Iron County, Utah**

<b>Original Date of Plan:</b>	9 September 2000
<b>Date of Last Plan Review:</b>	2 October 2003
<b>Date of Last Amendment And P.E. Certification:</b>	5 January 2004

Steve Summy, Environmental Focal Point  
Telephone: (801) 524-5112 Ext. 225

I hereby certify that I have examined the facility, and being familiar with the provisions of Title 40 of the Code of Federal Regulations Part 112, I attest that this Spill Prevention, Control, and Countermeasure (SPCC) plan has been prepared in accordance with good engineering practices.

Registration No. #145084-2202 State UT

\_\_\_\_\_ **REVIEW DOCUMENTATION AND MANAGEMENT APPROVAL PAGE**

**REVIEW DOCUMENTATION**

In accordance with Title 40 of the Code of Federal Regulations (40 CFR) Part 112.5(b), a review and evaluation of this SPCC plan will be conducted at least once every 5 years. As a result of this review and evaluation, the National Weather Service will amend the SPCC plan within 6-months of the review to include more effective prevention and control technology if the following both apply:

- Such Technology will significantly reduce the likelihood of a spill event from the facility
- If such technology has been field-proven at the time of review

Any amendment to the SPCC plan shall be certified by a Professional Engineer within 6-months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines or waters of the contiguous zone... or affecting certain natural resources.

<b>Review Date</b>	<b>Signature of Responsible Manager</b>	<b>Amended (Yes or No)? <sup>a</sup></b>
30 Aug 2000		Yes (Rewrite of plan)
5 Jan. 2004		Yes (Updated)

a Amendment necessary and certified by a Registered Professional Engineer per Title 40 CFR Part 112.3(d)

**MANAGEMENT APPROVAL**

The National Weather Service is committed to the prevention of discharges of oil to navigable waters and the environment. We maintain the highest standards for SPCC through regular review, updating and implementation of this SPCC plan for the National Weather Service Facility located in Iron County east of Cedar City, Utah.

**Larry Dunn, Meteorologist-In-Charge**

Printed Name and Title of Responsible Manager

\_\_\_\_\_  
Signature and Date

## CONTENTS

<b>Section</b>	<b>Page</b>
Certification .....	i
Review Documentation and Management Approval .....	ii
Contents .....	...iii-iv
<b>PART I - GENERAL INFORMATION .....</b>	<b>1</b>
A.    GENERAL .....	1
1.    Name .....	1
2.    Type .....	1
3.    Date of Initial Operation .....	1
4.    Location .....	1
5.    Name and Address of Operator .....	1
6.    Facility Contacts .....	1
B.    SITE DESCRIPTION AND OPERATIONS .....	2
1.    Facility Location, Layout, and Operations .....	2
2.    Facility Storage .....	2
3.    Drainage Pathway and Distance to Navigable Waters .....	3
4.    Spill History .....	4
5.    Spill Potential, Volumes, and Rates.....	4
6.    Discussion of Facility Conformance with 40 CFR112.....	4
7.    Type of Oil and Storage Capacity .....	5
<b>PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL PREVENTION AND CONTROL .....</b>	<b>5</b>
A.    Tank and System Design For Spill Prevention.....	5
1.    RDA Exterior Aboveground Storage Tank.....	5
2.    RDA Interior Day Tanks in generator Shelter.....	6
3.    Tank Refueling and Truck Unloading Operations.....	6
4.    Inspections and Records.....	8
5.    Site Security .....	8
B.    SPILL CONTROL .....	
1.    Secondary Containment Designs, Construction Material and Volume....	9
2.    Spill Kits - Type and Location .....	9
3.    Personal Protective Equipment (PPE).....	9
<b>PART III - SPILL COUNTERMEASURES AND REPORTING .....</b>	<b>10</b>
A.    SPILL AND COUNTERMEASURES .....	10
1.    SWIMS.....	10

## CONTENTS (continued)

<b>B. SPILL REPORTING .....</b>	<b>11</b>
1. General Notification Procedures For All Spills .....	11
2. Federal Notifications.....	11
3. State Notification .....	12
4. Local Contacts and Notifications.....	12
5. Cleanup Contractor Notification.....	12

<b>Section</b>	<b>Page</b>
PART IV - RECOMMENDED IMPROVEMENTS .....	13
A. PHYSICAL UPGRADES .....	13
B. PROCEDURAL CHANGES .....	13
1. Tank Truck Unloading Procedure .....	13
2. Inspections and Preventative Maintenance .....	13
3. Training .....	14

### **Appendix**

A. TANK ULLAGE/FUELING LOG AND FUEL UNLOADING PROCEDURE CHECKLIST	
B. INSPECTION CHECKLISTS (Monthly and Annual)	
C. TRAINING OUTLINE & TRAINING RECORD FORM..	
D. SPILL RESPONSE EXERCISE FORM; SPILL REPORTING FORM & CLEANUP CONTRACTOR INFORMATION	
E. CROSS REFERENCE OF THE REQUIREMENTS OF TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, SECTION 112, WITH THIS PLAN	
F. MATERIALS SAFETY DATA SHEET ATTACHMENT	
G. SPILL CLEANUP KIT INFORMATION ATTACHMENT	
H. FUEL TANK DATA AND INFORMATION SHEET ATTACHMENT	
I. PERMITS	
J. PHOTOGRAPHS OF FACILITY, TANK AND PIPING	
K. FIGURE 1, FIGURE 2 and FIGURE 3	

## TABLES

<b>Table</b>	<b>Page</b>
1. DESCRIPTIVE INVENTORY OF FACILITY STORAGE .....	5
2. POTENTIAL SPILL SOURCES AND VOLUMES .....	15

## **PART I - GENERAL INFORMATION**

### **A. GENERAL**

This section of the Spill Prevention, Control, and Countermeasure (SPCC) plan provides general information about the facility.

**NOTE:**        **A complete copy of this SPCC plan shall be maintained and kept available at the Cedar City RDA facility.**

- 1. Name**  
National Weather Service (NWS)- Cedar City Remote Data Acquisition (RDA)  
Radar Site
- 2. Type**  
This facility is an onshore (non-production) facility that operates as an RDA radar site. The facility is only staffed on an as-needed basis; however, a nearby Federal Aviation Administration (FAA) radar site is manned on a near-continuous basis. The FAA technicians are under contract, with the NWS, for partial maintenance of the RDA facility. These technicians have keys to the facility and are available to respond to any emergency at the RDA.
- 3. Date of Initial Operation**  
August 1996 — Above Ground Fuel Tank Installed
- 4. Location**  
National Weather Service RDA                      Latitude: 37° -35'-27" North  
Cedar City, Iron County, Utah                      Longitude: 112°-51'-44" West  
(Blowhard Mountain - 17 Miles                      Elevation: 10,600 ft. MSL  
East of Cedar City, UT)
- 5. Name and Address of Operator**  
National Weather Service Forecast Office  
2242 W North Temple Street  
Salt Lake City International Airport  
Salt Lake City, Utah 84116  
Phone: (801) 524-4378
- 6. Facility Contacts**

Name	Title	Telephone Number
Steve Summy	Environmental Focal Pt.	(801) 524-5154
Greg Wallace	Electronics Systems Adm.	(801) 524-5710
Larry Dunn	MIC	(801) 524-5154

## **B. SITE DESCRIPTION AND OPERATIONS**

This section describes the site and its operations.

### **1. Facility Location, Layout, and Operations**

The facility is located in southwestern Utah, east of Cedar City in Iron County (Appendix K, Figure 1) and is approximately 230 miles southwest of the Salt Lake City International Airport. The site is located on ground which has a slope of approximately 10% to the south. The facilities at this site consists of a steel tower with radar pedestal and radome, an Equipment Shelter, a Living Quarters Shelter and an RDA Generator Shelter. All shelters are enclosed in a steel Snow Shelter Building which has a concrete floor. The Emergency Power system is composed of an 80kw diesel powered generator with two 240 gallon interconnected, steel diesel fuel day-tanks and a 1,000-gallon, vault-type, aboveground storage tank (AST). The fuel in the AST is pumped to the day tanks, which is connected to an 80kw emergency power generator. The day tanks and generator are located in the enclosed generator building which has a floor designed for secondary containment of the contents of the two day tanks.

The estimated fuel usage is approximately 20 to 50 gallons per month. This estimate is based on an automatic test of the generator once per week for 30 minutes. Fuel consumption would increase based on the and duration of any power outages.

The AST is filled at the beginning of each winter season. The contract with FAA allows for the NWS AST to be topped when the FAA tanks are filled. The average fuel consumption of the generator is approximately 4-gallons per hour. The generator is automatically started if the commercial power is interrupted and will continue to run until the commercial power is restored and stabilized. Under normal conditions, the AST is filled once or twice each year.

### **2. Facility Storage**

The RDA AST is a 1,000-gallon, Convault, rectangular shaped, horizontal tank. This AST is located in an unfenced area adjacent to the east wall of the Snow Shelter building. The AST and loading area are lighted to provide some visual inspection during the hours of darkness. This AST meets the Underwriter's Laboratory Standard 2085 for protected secondary containment. The primary steel tank is encased in a 6-inch thick reinforced concrete secondary containment vault. This AST is installed on a concrete pad with earthquake tie-downs. This AST has primary and emergency vents, as well as overfill protection that includes an automatic shutoff valve, an overfill alarm and a 7-gallon overfill bucket.

This AST is provided with an electronic monitoring and alarm system that monitors the interstitial area inside the tank for leakage. The system also monitors for overfill conditions. Should either an overfill or leakage in the interstitial area occur, the system provides both visual and audible alarms. Because of the remoteness and unmanned nature of this site the alarms will not be heard or seen unless a person is at the site.

A 3/4-inch supply line from the AST is encased in a 4-inch diameter polyvinyl chloride pipe that exits the AST from its top and runs to the exterior wall of the generator shelter. There are two 240-gallon interconnected day tanks located between the AST and the generator. The day-tanks sit on the floor of the generator shelter. The floor and the walls of this shelter are designed and constructed for the shelter to act as a secondary containment for the contents of the two day-tanks.

A liquid level switch has been installed on the floor of the generator shelter. In the event of a leak, in one of the day tanks, the switch will activate and shut down the fuel transfer pump which pumps fuel from the AST to the day tanks. This will prevent the secondary containment capacity of the Generator Shelter from being exceeded.

Table 1 summarizes the pertinent information on the ASTs at this facility.

### **3. Drainage Pathway and Distance to Navigable Waters**

This RDA site and associated AST and generator are located on sloping ground. The drainage from this site is to the south in an open swale drainage ditch. (See APPENDIX K - Figure 2). Small spills, from the AST, can be contained on the concrete slab or in the immediate ground area around the AST. Large spills will run in the swale to the south and will be absorbed by the soil. Except for very unusual circumstances, any spilled fuel will remain on the NWS property and if the soil is contaminated, the contamination can be mitigated as necessary. Large spills occurring during snow-melt season or heavy rain storms may run south down the slope off of Blowhard Mountain into the headwaters of the North Fork of the Virgin River. Because of the remoteness and difficult access to this site, it will be a very rare occasion when a delivery truck would be unloading fuel during the snow melt season or during a heavy rain storm.

The RDA Generator Building, contains 2-240 gallon, rectangular steel ASTs. The building is designed to provide secondary containment for the total tank capacity. The Snow Shelter Building will also act as a second secondary containment for the generator shelter in the event that leakage should come from the day tanks or the fuel piping that is located within the Snow Shelter building. The drainage path is shown in Appendix K - Figure 2.

#### **4. Spill History**

Reportable Spill events from 1996 to present (date on cover of this plan):

None

#### **5. Spill Potential, Volumes, and Rates**

The most probable causes for potential spills from the AST are from overfilling or a ruptured hose during fueling. For this AST, spills caused by failure of the fuel supply line, loss of structural integrity, vehicle collisions, or earthquakes are low probability events. Table 2 summarizes the potential type of failure, potential spill volume, estimated rate, and direction of spill flow from the tanks.

#### **6. Discussion of Facility Conformance with 40 CFR 112**

Every effort has been made, by the NWS, to assure that this facility fully conforms with the applicable provisions of 40 CFR 112. The following is a brief summary of the applicable characteristics of the facility:

- a. This is a remote, unmanned facility located at a mountain site. The site is not accessible, by wheeled vehicle, from about November to June of each year.
- b. There is one emergency generator associated with this facility. The generator has two day tanks with a storage capacity of 480 gallons and a 1000 gallon AST to provide ample fuel for long power outages during the winter months. The AST and the Day Tanks have full secondary containment features. Total fuel stored is less than 1500 U.S. gallons.
- c. The facility is unmanned. There is a manned FAA radar facility about 1300 feet from this site and the FAA technicians have a contract with NWS to provide maintenance for the RDA equipment and facility. These FAA technicians are available to help provide security, detect leaks or spills and report problems relative to any discharge events which may occur.
- d. The SPCC Plan:
  1. Has the full approval of the appropriate NWS managers.
  2. Has been prepared and certified by a professional engineer.
  3. Provides for prevention efforts to assure that fuel oil discharges will not occur.
  4. Provides a vehicle to assure that personnel training is accomplished.
  5. Provides for appropriate reporting of oil discharges.



6. Provides for appropriate mitigating actions to be taken if an oil discharge should occur.

**7. Type of Oil and Storage Capacity**

**TABLE 1**

**DESCRIPTIVE INVENTORY OF FACILITY STORAGE**

<b>Tank</b>	<b>Nominal Capacity (Gallons)</b>	<b>Product Stored</b>	<b>Type</b>	<b>Double Walled ?</b>
RDA AST	1,000	Diesel fuel # 1	Vault-Type AST	Yes
RDA Day Tanks	2 x 240 gal tanks interconnected.	Diesel fuel # 1	Rectangular Steel ASTs	No*

Notes: AST is an Aboveground Storage Tank

\* Tanks are contained within a shelter with a floor designed for containment of liquids.

**PART II - DESIGN COMPONENTS AND OPERATIONAL PROCEDURES FOR SPILL  
PREVENTION AND CONTROL**

This section discusses spill prevention and control measures that have been or shall be implemented at the facility.

**A. TANK AND SYSTEM DESIGN FOR SPILL PREVENTION**

This section describes design components and operating procedures that shall be implemented at the facility to prevent oil spills.

**1. RDA Exterior Aboveground Storage Tank**

\_\_\_\_\_ This AST construction shall be compatible with the Number 1 diesel fuel held by the tank. The AST shall have secondary containment around the primary tank shell. A level gauge or dip-stick or fuel gage shall indicate the fuel level (from empty to full).

An automatic shut-off valve on the fill spout shall be set to close at 90 percent of capacity (900 gallons). The AST also shall have an audible high-level alarm set at 85 percent of capacity (850 gallons) and interstitial monitoring device between the primary and secondary tanks that is connected to the audible alarm system. A 7-gallon-capacity spill container shall surround the fill spout.

---

Piping: An anti siphoning valve shall be located between the AST and the pump to prevent unwanted fuel from being siphoned from the AST. The outside piping shall be contained within another pipe and protected from damage.

## **2. RDA Interior Day-Tanks in Generator Shelter**

---

The steel interior Day-Tanks shall be compatible with the Number 1 diesel fuel held by the tank. These tanks shall be installed in the Generator Shelter. The floor of the shelter shall be designed and constructed to provide secondary containment for the entire contents of the two steel tanks.

A level gauge or dip-stick shall indicate the fuel level (from empty to full).

Piping: An anti siphoning valve shall be located between the AST and the Day-Tank pump to prevent unwanted fuel from being siphoned from the AST. An automatic cut-off switch shall be installed on the floor of the containment shelter to assure that the fuel transfer pump will not operate in the event that the day tanks, in the shelter, should leak fuel onto the floor of the shelter.

---

## **3. Tank Refueling and Truck Unloading Operations**

All delivery drivers shall have U.S. Department of Transportation hazardous material transportation training as required by Federal law.

The remainder of this section discusses the procedures that shall be used during unloading of fuel from the tank truck into the AST to prevent spills. This procedure shall be documented every time refueling occurs using the form found in Appendix A. Copies of this form shall be kept for 5-years.

- a.** The following procedure shall be used **before** fuel delivery and unloading: (Appendix A)
  - (1). Ensure that the delivery driver understands the directions to the site and the road conditions and the problems associated with delivering fuel to this remote site.

- (2). The Facility Manager or his designated representative should determine the available capacity (ullage) of the AST by converting the reading on the fuel gauge to gallons (See Appendix A). This ullage is communicated to the fuel supply contractor and marked in the fueling log.
  - (3). Move spill containment equipment such as booms, spill barriers or spill kits into the unloading area.
  - (4). Block the tank truck wheels.
  - (5). Place drip pans under all pump hose fittings (if applicable) before unloading.
  - (6). The Facility Manager or his designated representative and the delivery driver ensure the fill nozzle is placed in the appropriate AST appurtenance.
- b.** The following procedure shall be used **during** the fuel unloading period:  
(APPENDIX A)
- (1). The Facility Manager or his designated representative and the delivery driver shall remain with or near the vehicle and the fuel tanks at all times during unloading. Gauges on the AST and the truck, as well as the fueling nozzle, shall be continuously monitored to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading procedure immediately to ensure fuel ullage is not exceeded.
- c.** The following procedure shall be used **after** fuel unloading is completed:  
(Appendix A)
- (1). Record the amount of fuel transferred to the AST in the log (Appendix A).
  - (2). Drain the fill hose into appropriate containers and ensure that all drain valves are closed (if applicable) before removal of the hose from the tank
  - (3). Pour any uncontaminated fuel in the drip pans, tank truck containment pool, or spill pipe spill bucket container into the AST (if it has the capacity) or dispose of appropriately.
  - (4). Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the tank.
  - (5). Remove the blocks from truck wheels.
  - (6). Place a copy of the fuel-unloading checklist in the SPCC.

#### **4. Inspections and Records**

Inspection and Maintenance of Tanks: The AST shall be inspected, each time a maintenance technician visits the site, for any fuel leaks, especially at seams (including the underside). The outside of exposed piping shall also be inspected. Monthly and annual inspections shall follow the checklists shown in Appendix B.

Record Keeping: The Environmental/Safety Focal Point or Maintenance Technician, (person responsible for spill prevention at the facility) shall be responsible for completing (1) The Ullage Logs and documentation of Fuel Unloading Procedures (Appendix A). (2) The Records of Inspections (Appendix B). (3) The Training Record (Appendix C) and (4) The Spill Response Record (Appendix D). These records shall be maintained for at least 5-years from the time of the recorded action.

#### **5. Site Security**

The AST does not have adequate lighting to detect spills at night. A security fence with a locked gate is not practical because of the heavy winter snows. The site is remote and only occupied when maintenance technicians visit. There have not been any significant vandalism events at this site since the site was opened in 1996. Signs around the tanks: (1) Warn of the presence of a combustible liquid, (2) Identify the combustible liquid as Diesel Fuel and (3) Warn that smoking is not permitted near the tanks. A fire extinguisher is located in the generator building. The exterior AST is located away from the parking lot, therefore, vehicle guard posts are not considered necessary at this site.

### **B. SPILL CONTROL**

This section describes control measures that have been implemented to prevent any spilled oil from entering navigable waters or adjoining shorelines.

#### **1. Secondary Containment Designs, Construction Material, and Volume**

The secondary containment tank on the Vault-Type AST shall be sized to contain 110 percent of the tank volume. An interstitial monitoring system that can detect fuel of 1-inch or more in the secondary shell of the AST shall be included in the tank design.

The secondary containment for the steel tanks is built into the floor of the Generator Shelter. This containment is in excess of 110 percent of the tank volume.

#### **2. Spill Kits Type and Location**

The Pig 211 spill kits or equivalent shall be located in the generator room or in the Snow Shelter near the respective ASTs. The spill kits are designed to absorb up

to 40-gallons each of diesel fuel and to divert a spill from navigable waters. The kits include oil absorbent socks and mats in a polyethylene container that doubles as a disposal container.

### **3. Personal Protective Equipment (PPE)**

- PPE information is specified in the **MSDS**
- Eye protection is accomplished by the use of **Chemical Goggles**
- Hand protection is accomplished by the use of **Nitril Gloves**
- Other clothing & equipment - if contaminated, must be removed and laundered before reuse. Items which cannot be laundered should be discarded.
- Appropriate NIOSH-approved respiratory protection to avoid inhalation of mist or vapors which may be present under hot temperature conditions.

## **PART III - SPILL COUNTERMEASURES AND REPORTING**

### **A. SPILL COUNTERMEASURES**

This section presents countermeasures to contain, clean up, and mitigate the effects of any oil spills at this site.

#### **1. SWIMS**

A spill containment and cleanup activity will never take precedence over the safety of personnel. No countermeasures will be undertaken until conditions are safe for workers. The **SWIMS** procedure should be implemented as countermeasures:

**S** - Stop the leak and eliminate ignition sources.

- a. Attempt to seal or some how stop leak if it can be done safely.
- b. Attempt to divert flow away from any drainage ditch, storm sewer or sanitary sewer with a spill barrier or the contents of spill kit. The spill kit is located in the Generator Building.
- c. Eliminate all ignition sources in the immediate area.

**W** - Warn others.

- a. Yell out "SPILL". Inform the person in-charge at your facility.
- b. Account for all personnel and ensure their safety.
- c. Notify contacts and emergency response contractor as described in the following section for assistance in control and cleanup.

**I** - Isolate the area.

- a. Rope off the area

**M** - Minimize your exposure to the spilled material by use of appropriate clothing and protective equipment. If possible, remain upwind of the spilled material.

**S** - Standby to assist the emergency response contractor.

## **B. SPILL REPORTING**

This section discusses the reporting procedures for spills of diesel fuel at the facility. The people and organizations that are notified vary, based on the quantity of the spill, whether it reaches navigable waters or adjoining shorelines, the frequency and history of spills and the potential impacts which the spill may have on people, property or the environment.

A spill report form that requests the information to be reported to all agencies in writing (to the extent known) is included in Appendix D. Copies of the completed form should be sent to the NWS Environmental Compliance Officer and the National Oceanic and Atmospheric Administration (NOAA) Western Regional Compliance Officer (see next section).

### **1. General Notification Procedures For All Spills**

- First, call **911** (or the local emergency agency) if there is an immediate emergency.
- Next, notify the appropriate persons within the NWS & NOAA:
  - ▶ **Mike Jacob, (301) 713-1838 Ext. 165**, NWS Environmental Compliance Officer.
  - ▶ **Olga Kebis, (301) 713-1838 Ext. 173**, NWS Safety Officer
  - ▶ **Bob Kinsinger, (801) 524-5138 Ext.223**, NWS Western Regional Environmental/Safety Coordinator
  - ▶ **Thanh Minh Trinh, (206) 526-6647**, NOAA Western Regional Compliance Officer (RECO)

### **2. Federal Notifications**

The Federal Clean Water Act as described in 40 Part 110.6, requires notifying the U.S. Environmental Protection Agency (EPA) National Response Center (or the U.S. Coast Guard (USCG) as soon as anyone has knowledge of any discharge of oil in quantities that “may be harmful,” 40 CFR 110.3 defines “may be harmful” as a discharge if either of the following applies:

- Violates applicable water quality standards
- Causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines

If either of these criteria are met, contact the following:

- The National Response Center (EPA and USCG): **(800) 424-8802.**

Under the SPCC regulations, spill information listed in 40 CFR 112.4(a) must be reported to the regional EPA office within 60-days. If either of the following occurs, call the National Response Center at the number shown above:

- A discharge of more than 1,000 gallons of oil into or upon navigable waters or adjoining shore lines in a single event
- Two spill events, that cause a discharge of more than 42 gallons in each event, within any 12-month period.

Diesel fuel is not listed as a hazardous substance under the Comprehensive Environmental Response Compensation, and Liability Act (CERCLA); therefore, no other notification to the EPA is required for discharges of diesel fuel other than those listed previously.

### **3. State Notifications**

The State of Utah Code 19-5-114 requires that the spill of any substance including refined petroleum product (gasoline, diesel, oil, etc.) that could pollute the waters of the State of Utah must be reported to the **Utah Department of Water Quality (UDWQ) immediately as follows:** (See Appendix “D”)

- During business hours, contact the UDWQ at (801) 538-6146.
- During non-business hours contact the UDWQ at (801) 536-4123.

### **4. Local Contacts and Notifications:**

- Iron County LEPC (Local Emergency Planning Committee)  
Sheriff - Dude Benson, Coordinator - Phone (435) 586-6511
- Dixie National Forest - Phone (435) 865-3700

### **5. Cleanup Contractor Notification**

An emergency response contractor should also be notified to assist with the cleanup, if necessary. NWS has identified the following contractor that is available for emergency response:

- TW Company Phone (801) 299-1900  
P.O. Box 540820 Fax (801) 299-1949  
North Salt Lake, Utah 84045



## **PART IV - RECOMMENDED IMPROVEMENTS**

In accordance with 40 CFR 112.7, this section presents physical upgrades or procedural changes that are not yet fully operational but are called for in the plan.

### **A. PHYSICAL UPGRADES**

The AST, piping system, alarm system, and spill response equipment satisfy all current Federal and State of Utah requirements and are in good operating condition. However, the following changes and upgrades are recommended.

1. Install a return fuel line from the Day Tanks, in the Generator Building, to the Exterior AST. The purpose of this line is to prevent any spills which may occur if the fuel transfer pump fails to shut off.

### **B. PROCEDURAL CHANGES**

#### **1. Tank Truck Unloading Procedure**

The current tank truck unloading area does not drain into a catchment basin or a treatment facility designed to handle spills. Unloading of fuel occurs infrequently; however, the following procedural improvement should be implemented to minimize the likelihood of water or soil contamination. Containment booms and spill barriers from the spill kits described in Part II, Section B.2 of this plan shall be made easily accessible during tank truck unloading. The containment booms and spill barriers combined with constant monitoring of the fuel unloading process by NWS personnel or representatives will meet the substantive requirements of 40 CFR 112.7(a)(5).

#### **2. Inspections and Preventative Maintenance**

The inspection checklists found in Appendix B should be followed. This requirement is found in 40 CFR 112.7(e). The interstitial monitoring device in the Exterior AST is designed to monitor the integrity of the primary tank. Visual inspections of the outside of the secondary wall of the AST should serve to signal potential problems with the tank's integrity. If a problem is suspected with either tank, tightness testing should be initiated soon after discovery and appropriate corrective actions taken. The Interior Day Tanks are in the RDA Generator Building. Visual inspections of these tanks should be conducted each time that the building is entered. If traces of oil appear on the tank, piping or on the floor of the building, corrective action must be promptly initiated.

### **3. Training**

The Environmental/Safety Focal Point and an alternate should be trained in the intent of the applicable oil spill regulations and how to implement the inspection and maintenance procedures outlined in the previous section. Spill control and countermeasure should also be included in the training. The alternate should be designated in case the primary person is off site at the time of a spill. A recommended outline for the training is found in Appendix C.

Training should be repeated once per year. All new personnel responsible for implementing the SPCC plan should be properly trained before beginning the new position. A record of who was trained, when, and by whom, should be filed with this SPCC plan and kept for a period of 5-years. This requirement is found in 40 CFR 112.7(f).

**NOTE:** Provide appropriate SPCC training for all FAA personnel who are delegated to receive fuel deliveries or to be responsible to work at this site.

**TABLE 2**  
**POTENTIAL SPILL SOURCES AND VOLUMES**

Source	Event	Potential Spill Volume (gallons)	Estimated Rate (gallons per minute)	Direction of Spill Flow	Remarks
Vault - Type Above-ground Storage Tank and RDA Generator Building Steel Day-Tanks  NOTE: The Vault Type AST and the Steel Day Tanks are separated by about 50' and are interconnected via a fuel transfer pump.	Overfilling or a ruptured hose during fueling.	0 to 40 <sup>a</sup>	80 <sup>b</sup>	Pool to the South	Spills of this nature would largely be contained on the paved area or in the soil around the tank area.
	Failure of fuel supply line to pump	* 0 to 1000 ** 0 to 480	Variable depending on size of hole	Pool to the South	Can be minimized through routine inspections, Primary line also has secondary containment from the storage tank to generator building.
	Structural Failure	* 0 to 1000 ** 0 to 480	Variable depending on extent of damage	Pool to the South	Low probability event that both primary and secondary tank shells would fail.
	Vehicle Collision	* 0 to 1000 ** 0 to 500	Variable depending on extent of damage	Pool to the South	Low probability event. Vehicle traffic is limited and traffic flow is not directly towards tank.
	Overturn or puncture in an earthquake	* 0 to 1000 ** 0 to 500	Variable depending on extent of damage	Pool to the South	Low to moderate probability event. Double walled tank gives extra protection from rupture, but a large earthquake could cause a spill. The single walled steel tank has secondary containment within the shelter. However the shelter could be damaged in a earthquake.
	Failure of the pump to shut down after filling the day-tank or failure of the line from pump to day tank.	* 0 to 1000 ** 0 to 480	Variable depending on size of hole and the time the pump operates.	Pool in the Snow Shelter	Can be minimized through routine inspections and maintenance.
	Structural Failure or Vandalism	* 0 to 1000 ** 0 to 480	Variable, depending on the extent of damage	Pool to the South	Can be minimized through routine inspections, maintenance and by the adherence to good security practices.

- Notes:
- a Based on a maximum pumping rate of 80 gallons per minute from the fill truck and a maximum of 30 seconds to turn off the pump.
  - b Approximate maximum pumping rate of fill truck.
  - \* Vault-Type 1000 gallon tank mounted outside on a concrete pad.
  - \*\* Two rectangular, interconnected steel tanks mounted inside the RDA Generator Shelter.

## **APPENDIX A**

### **TANK ULLAGE/FUELING LOG AND FUEL UNLOADING PROCEDURE CHECKLIST**

**(3 Pages)**

**APPENDIX A-1**

**TANK ULLAGE AND FUELING LOG**

**Station Name:** \_\_\_\_\_

**Tank Capacity** \_\_\_\_\_ **gallons**

<b>Date</b>	<b>Initials</b>	<b>Gauge Reading</b>	<b>Initial Volume of Fuel in Tank <sup>a</sup> (Gallons)</b>	<b>Available Capacity or Ullage <sup>b</sup> (Gallons)</b>	<b>Quantity Added (Gallons)</b>	<b>Comments</b>

Notes:

- a      From gauge reading
- b      Available capacity = tank capacity (900-gallons) - initial volume of fuel in tank

## APPENDIX A-2

### FUEL UNLOADING PROCEDURE CHECKLIST (Continued)

Site Name: \_\_\_\_\_ Date: \_\_\_\_\_ Tank: \_\_\_\_\_

NWS Representative: \_\_\_\_\_ Supplier: \_\_\_\_\_

X	ITEM	DESCRIPTION	COMMENTS
<b>The Following Six Items Must Be Completed Before Fuel Unloading</b>			
	1	Ensure the audible high-level alarm system and automatic shut off valve are functioning properly.	
	2	Determine the available capacity (ullage) of the aboveground storage tank (AST) by converting the reading on the fuel gauge to gallons (See Appendix A, Page A-1). This ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor.	
	3	Move spill containment equipment such as booms or spill barriers into the unloading area.	
	4	Block the wheels of the tank truck.	
	5	Place drip pans under all pump hose fittings (if applicable) after the hose is hooked up to the AST and before unloading.	
	6	Ensure the fill nozzle is in place in the appropriate AST appurtenance. In this case, the fill nozzle is placed in the fill pipe connected to the round spill container.	
<b>During Unloading</b>			
	7	Ensure that the NWS representative and the tank truck operator remain with the vehicle at all times during unloading.	
	8	Monitor the gauges on the AST and the truck continuously to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading or fuel as soon as possible.	

X	ITEM	DESCRIPTION	COMMENTS
<b>The Following Six Items Must Be Completed After The Fuel Unloading Has Been Completed</b>			
	9	Record the amount of fuel unloaded in the log (Appendix A, page A-1)	
	10	Before removing the fill hose from the AST, ensure that it is drained and that all drain valves are closed (If applicable)	
	11	Pour any fuel in the drip pans, tank truck containment pool, or spill container on the fill pipe into the AST (if it has the capacity) or dispose of appropriately (describe how it was disposed of if applicable).	
	12	Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the AST.	
	13	Remove the blocks from the tank truck wheels.	
	14	Place a copy of this fuel-unloading checklist in the SPCC Plan folder.	

## **APPENDIX B**

### **INSPECTION CHECKLISTS**

**(3 Pages)**



**APPENDIX B**  
**INSPECTION FORMS**

<b>MONTHLY INSPECTION CHECKLIST (Page 1 of 2)</b>			
Site Name:		Tank Name or Number:	
Date of Inspection:		Inspected By:	
Date of Last Inspection:		Signature:	
<b>A. TANKS</b>	<b>YES</b>	<b>NO</b>	<b>NOTES</b>
1. Are there any oil stains on the outside of the tank, including the underside?			
2. Is there any oil on the ground, concrete, or asphalt around the tank?			
3. Are there any visible cracks or indications of corrosion on the tank, at fittings, joints, or seals? (Such as paint peeling or rust spots)			
4. Are there any raised spots, dents, or cracks on the tank?			
5. Does it appear that the foundation has shifted or settled?			
6. Is the fuel gauge working properly?			
7. Are all vents clear so they may properly operate?			
8. If rainwater is present in secondary containment area, does sufficient volume remain for spill control? (If applicable)			

# INSPECTION FORMS

MONTHLY INSPECTION CHECKLIST (Page 2 of 2)			
Site Name:		Tank Name or Number:	
Date of Inspection:		Inspected By:	
Date of Last Inspection:		Signature:	
<b>B. PIPING</b>	<b>YES</b>	<b>NO</b>	<b>NOTES</b>
1. Is there any oil on the outside of or under any aboveground piping, hoses, fittings, or valves?			
2. Are aboveground piping, hoses, fittings, or valves in good working condition?			
<b>C. SECURITY/SAFETY/SPILL COUNTERMEASURES</b>			
1. Are lights working properly to detect a spill at night?			
2. Are all locks in the "lock" position?			
3. Are all warning signs properly posted and readable?			
4. Are vehicle guard posts in place and properly secured? (If applicable)			
5. Are spill kits easily accessible, protected from the weather, and complete?			
<b>Corrective Actions Required:</b>			

ANNUAL INSPECTION CHECKLIST (Page 1 of 1)			
Site Name:		Tank Name or Number:	
Date of Inspection:		Inspected By:	
Date of Last Inspection:		Signature:	
	YES	NO	
<b>A. MONTHLY CHECKLIST</b>			
1. Has Monthly Inspection Checklist been completed?			
<b>B. TANKS</b>			
1. Are all alarms and automatic shutoff devices working properly?			
2. Is interstitial monitor functioning properly (If applicable)?			
<b>C. OTHER</b>			
1.			
2.			
Corrective Actions Required:			

**APPENDIX C**

**TRAINING OUTLINE**

**(1 Page)**

**TRAINING RECORD**

**(1 Page)**

**COPY OF TITLE 40 OF THE CODE OF FEDERAL  
REGULATIONS SECTIONS 112.1 THROUGH 112.20 - OIL POLLUTION  
PREVENTION**

**(13 Pages)**

## **APPENDIX C-1**

### **TRAINING OUTLINE: SPILL PREVENTION, CONTROL AND COUNTERMEASURES**

Training will be provided for facility personnel at the following times:

1. System startup or whenever new equipment is installed
2. Within the first week of employment for new personnel
3. Annually

The training will include complete instruction in the elements of the facility's Spill Prevention, Control, and Countermeasure plan and will include the following:

1. Pollution control laws, rules, and regulations including a summary of Title 40 of the Code of Federal Regulations Part 112 "Oil Pollution Prevention" (see Attachment)
2. Fuel Storage System
  - A. Purpose and application of the following system elements:
    - Tanks
    - Piping
    - Pumps
    - Accessory equipment
    - Electronic monitors
  - B. Operation, maintenance, and inspection of system elements
3. Spill Prevention
  - A. Potential spill sources
  - B. Spill flow direction and impact on navigable waters
  - C. Procedures to prevent spills, especially during fuel unloading
4. Spill Control
  - A. Secondary containment
  - B. Safety valves
  - C. Pump and equipment shutoff switches
  - D. Use of catch basin inlet covers or other diversionary devices
5. Spill Countermeasures
  - A. Location and use of emergency phone numbers
  - B. Location and use of fire extinguishers
  - C. Location and use of spill cleanup kit
  - D. Stopping the leak

**APPENDIX C-2**

**TRAINING RECORD**

**NOTE: SPCC TRAINING IS REQUIRED ANNUALLY**

**SITE NAME** \_\_\_\_\_

<b>DATE OF TRAINING</b>	<b>EMPLOYEE TRAINED</b>	<b>TRAINER</b>	<b>REMARKS</b>

## **ATTACHMENTS**

### **TITLE 40 OF THE CODE OF FEDERAL REGULATIONS SECTION 112 OIL POLLUTION PREVENTION (13- Pages)**

## **APPENDIX D**

### **SPILL RESPONSE EXERCISE**

**(1 Page)**

### **SPILL REPORTING FORM**

**(1 Page)**



## APPENDIX D-1

### SPILL RESPONSE EXERCISE RECORD

**NOTE: A SPILL RESPONSE EXERCISE SHALL BE CONDUCTED ANNUALLY AND RECORDED BELOW.**

**SITE NAME** \_\_\_\_\_

<b>DATE OF EXERCISE</b>	<b>SIGNATURE OF ENVIRONMENTAL FOCAL POINT</b>	<b>REMARKS</b>

**Guidelines for conducting a “SPILL RESPONSE EXERCISE”:**

- **Review PART III (SPILL COUNTERMEASURES AND REPORTING) of this SPCC Plan**
- **Review the information required on the “SPILL REPORTING FORM” (Page D-2)**
- **Verify the telephone numbers shown on the “SPILL REPORTING FORM” (Page D-2)**
- **Record the Date of the Exercise and the Signature of the Environmental Focal Point**

**APPENDIX D-2**  
**SPILL REPORTING FORM**

<b>1. GENERAL</b>		
Name of Facility:	Address:	
Completed By:	Organization: <b>National Weather Service</b>	
Position:	Phone:	
<b>2. SPILL INFORMATION</b>		
Date:	Time:	
Location at Facility:	Quantity:	
Substance Spilled:	Other:	
<b>3. OUTSIDE NOTIFICATIONS:</b>		
<b>Agencies</b>	<b>Recorder at Outside Agency</b>	<b>Date and Time</b>
Call <b>911</b> (or the local emergency agency), if there is an immediate emergency.		
<b>NWS/NOAA:</b> <b>Mike Jacob, (301) 713-1838 Ext. 165</b> <b>Olga Kebis, (301) 713-1838 Ext. 173</b> <b>Bob Kinsinger, (801) 524-5138 Ext. 223</b> <b>Thanh Minh Trinh, (206) 526-6647</b>		
<b>EPA National Response Center or</b> <b>U.S. Coast Guard: (800) 424-8802</b>		
<b>Utah Division of Water Quality (UDWQ) (801) 536-6146</b>		
<b>LEPC: Iron County Sheriff: (435) 586-6511</b> <b>Dixie National Forest (435) 865-3700</b>		
<b>4. INFORMATION ON SOURCE AND CAUSE:</b>		
<b>5. DESCRIPTION OF ENVIRONMENTAL DAMAGE:</b>		
<b>6. CLEANUP ACTIONS(S) TAKEN:</b>		
<b>7. CORRECTIVE ACTION(S) TO PREVENT FUTURE SPILLS:</b>		

Note: All information must be filled in. If something is unknown, write "unknown".

Copies must be sent to the NWS/NOAA personnel listed above.

## **APPENDIX E**

### **CROSS REFERENCE OF THE REQUIREMENTS OF TITLE 40 OF THE CODE OF FEDERAL REGULATIONS, SECTION 112.7, WITH THIS DOCUMENT**

**(1 Page)**

## APPENDIX E

### CROSS REFERENCE OF THE REQUIREMENTS OF 40 CFR 112 AND THIS PLAN

CFR CITATION	ITEM	PLAN LOCATION
112.1(d)(2)(ii)	Criteria for need of an SPCC Plan	Table 1
112.4(a)	Reporting of Spills - Federal Notification	Part III, B
112.5(b)	SPCC Plan Review and Amendment Requirements - 5-year Max.	Page ii
112.5(c)	PE Certification of Technical Amendments	Page i
112.7	SPCC Plan - Full Approval by Management	Page i
112.7(a)(1)	Discussion of Facility Conformance	Part I, B6
112.7 (a) (3)	Facility Description and Diagrams	Part I, A & B; Appendix K
112.7 (a) (3) (i)	Type of Oil and Storage Capacity	Part I, B7; Table 1
112.7 (a) (3)(ii)	Discharge Prevention Measures	Part II
112.7(a)(3)(iii)	Discharge and Drainage Controls	Parts II & III
112.7 (a)(3)(iv)	Countermeasures for Discovery, Response and Cleanup	Part III
112.7 (a)(3) (v)	Methods of Disposal	Part III, B5
112.7 (a) (3)(vi)	Contact List and Phone Numbers	Part III, B; Appendix D-2
112.7 (a)(4)	Spill Reporting Form	Appendix D-2
112.7 (a)(5)	Procedures In Event of Discharge	Part III, A; Appendix D-2
112.7 (b)	Flow Prediction Information	Table 2 & Appendix K
112.7 (c)	Secondary Containment	Part II, A1 & A2
112.7(c)(1)(vii)	Sorbent Materials	Part II, B2; Appendix G
112.7 (e)	Inspections, Tests and Records	Part II, A4; Appendix B
112.7 (f)	Training	Part IV, B3; Appendix C
112.7 (g)(5)	Lighting	Part II, A5
112.8(6)	Container Testing	Appendix B

Note: CFR Code of Federal Regulations

## **APPENDIX F**

### **MATERIALS SAFETY DATA SHEET (MSDS)**

## **APPENDIX G**

### **SPILL CLEANUP KIT INFORMATION ATTACHMENT**

## **APPENDIX H**

### **FUEL TANK DATA AND INFORMATION SHEET ATTACHMENT**

## **APPENDIX I**

### **PERMITS**



## **APPENDIX J**

### **PHOTOGRAPHS OF FACILITY, TANKS AND PIPING**

## **APPENDIX K**

**Figure 1 .....Site Location Map**

**Figure 2.....Topographic Map & Site Layout**

**Figure 3 .....Site Piping Diagram**